

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| | | |
|---|--|--|
| Applicant's or agent's file reference APF-059 | FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below. | |
| International application No. PCT/KR2004/001606 | International filing date (<i>day/month/year</i>) 01 JULY 2004 (01.07.2004) | (Earliest) Priority Date (<i>day/month/year</i>) 04 JULY 2003 (04.07.2003) |
| Applicant PARK, Kwang-Don | | |

This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (See Box No. II)

3. ☐ Unity of invention is lacking (See Box No. III)

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

b. ☐ none of the figure is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2004/001606

A. CLASSIFICATION OF SUBJECT MATTER**IPC7 G06K 9/00**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC G06K 9/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean Patents and application For inventions 1975Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
KIPASS, FPD, PAJ**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| Y | KR 02-0085144 A (LEE, KWANG HEE) 16 NOV 2002(Family None) *Whole Documents | 1-19 |
| Y | US 4,767,205 A (Flow Cytometry Standards Corporation Research Triangle Park, N.C) 30 AUG 1988(Family None) *Whole Documents | 1-19 |
| Y | JP 08-0044872 A (TOPPAN PRINTING CO. LTD) 16 FEB 1996(Family None) *Whole Documents | 1-19 |
| A | KR 02-0081275 A (Moea Franco CO.LTD) 26 OCT 2002 *Whole Documents | 1-19 |
| A | WO 99/05660 A (Checkpoint Systems INC) 04. FEB 1999 *Whole Documents | 1-19 |

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

26 OCTOBER 2004 (26.10.2004)

Date of mailing of the international search report

27 OCTOBER 2004 (27.10.2004)

Name and mailing address of the ISA/KR



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Authorized officer

CHOI, Bong Mook

Telephone No. 82-42-481-5994



INTERNATIONAL SEARCH REPORT

Information on patent family members

Information on patent family members

International application No.

PCT/KR2004/001606

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|------------------------------|-------------------------------|------------------------------|
| KR 02-0081275 A WO 99/05660 A | 26. OCT 2002 04. FEB 1999 | WO 2001/55960 US 5,963,134 | 02. AUG 2001 05. OCT 1999 |

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

KOH, Young-Hoe

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Seoul 137-070 Republic of Korea

PCT

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) **27 OCTOBER 2004 (27.10.2004)**

Applicant's or agent's file reference
APF-059

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/KR2004/001606

International filing date (day/month/year)

01 JULY 2004 (01.07.2004)

Priority date(day/month/year)

04 JULY 2003 (04.07.2003)

International Patent Classification (IPC) or both national classification and IPC

IPC7 G06K 9/00

Applicant

PARK, Kwang-Don

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.
For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR



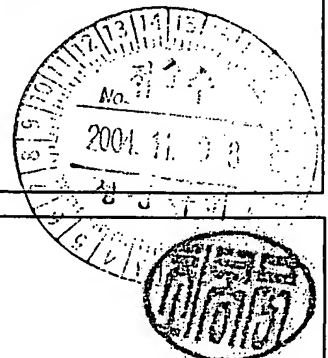
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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/001606

Box No. 1 Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/001606

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | | |
|-------------------------------|--------|------|-----|
| Novelty (N) | Claims | 1-19 | YES |
| | Claims | | NO |
| Inventive step (IS) | Claims | | YES |
| | Claims | 1-19 | NO |
| Industrial applicability (IA) | Claims | 1-19 | YES |
| | Claims | | NO |

2. Citations and explanations :

The following documents have been considered for the purpose of this written opinion:

D1: KR 2002-0085144 A (16 November 2002)

D2: US 4,767,205 A (30 August 1988)

D3: JP 08-44872 A (16 February 1996)

The present invention relates to a random-type identifying material for confirming the genuineness of a product comprising the steps of: identifying by an identifying means the position value and the characteristic value of an identifying material which is made such that foreign particles are irregularly scattered inside a three-dimensional figure; storing the values in a database; and a receiver, who receives the identifying material, identifying its information via an identifying means, transferring the information to an authorization system and comparing the information with the values stored in the database, thereby confirming the genuineness of the product.

D1 relates to a method for confirming the genuineness of a product, comprising the steps of a user receiving a code issued from a code issuing system and attaching said code to a product, and a receiver of it recognizing said code and accessing a central processing system and confirming the genuineness of the product.

D2 relates to a method for hidden identification, by mixing micro-sized particles of various colors and sizes with a solid material such as resin and using the mixture as an only identifier.

D3 relates to a multi-directionally illuminating object recognizing device comprising: an illuminating means for illuminating a target object in four directions of X, Y, Z and camera; an image acquisition means for acquiring the shading image of the target object by said illuminating means; and a recognizing means.

(Continued on Supplemental Sheet.)

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/KR2004/001606

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Box V.

The following are comparisons between the present invention and the cited inventions:

The present invention is similar to the invention of D2 in that they relate to a random-type identifying material, as the description of the present application mentions D2 as the prior art, and similar to the invention of D1 in the confirmation of the genuineness of a product by using an identifying material. The only difference between the present invention and the invention of D1 is that the random-type identifying material is used in the present invention whereas a code is used in D1. However, said feature of the present invention is disclosed in D2 and consequently the present invention can be embodied by the combination of D1 and D2.

The three-dimensional image process of the present invention is also similar to the multi-directionally illuminating object recognizing device of D3.

Accordingly, the present invention can be readily invented by the combination of D1-D3. Therefore, the subject matter of claims 1-19 is considered to lack an inventive step.